



PUBLIC CONCERNS ABOUT AVIAN FLU AND THE IMPLICATIONS FOR HEALTH COMMUNICATION: AN ANALYSIS OF NATIONAL SURVEY DATA

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AVIAN FLU COMMUNICATION PLANNING

- CDC is currently involved in large avian flu message development and testing efforts for communicating with the general public and vulnerable populations in the event of an outbreak
- Message development requires an understanding of the audience
- This presentation presents national survey data and discusses the implications for communication planning

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NEED FOR COMMUNICATION-RELEVANT AUDIENCE DATA

- CDC excels in the collection and analysis of epidemiological data, but this does not necessarily help communication planners understand audiences
- One source of data for audience analysis are the Styles mail panel surveys conducted for Porter Novelli, a social marketing firm

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TWO LINKED MAIL PANEL SURVEYS

- Porter Novelli ConsumerStyles Survey (N = 12,000)
- Porter Novelli HealthStyles Survey (N = 4,000)
- Annual surveys conducted for PN by Synovate
 - Global marketing research company
 - Panel of 600,000 US households, updated annually

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STYLES DATABASE

- Sample drawn from panel to be representative of the U.S. population on eight demographic variables
- Oversampling for minorities, households with children, and low income groups
- Poststratified to census benchmarks at completion of survey

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MULTI-PURPOSE CONSUMER PANELS IN MARKET RESEARCH

- Individuals and households who have agreed to participate in periodic surveys of products and lifestyle
- Developed and maintained by commercial marketing firms
- Can contain several hundred thousand to over a million individuals
- Represent a full range of census demographics

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ADVANTAGES OF PANEL SURVEYS

- High response rate
- Low rates of attrition in longitudinal research
- Customized samples easily selected
- Samples can be made demographically representative on multiple variables
- Much respondent and household information on file thus saving time and space on surveys
- Facilitates otherwise very difficult or expensive data collection

Source: Synovate Research on Research (1994)

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QUALITY OF CONSUMER PANEL SURVEY DATA

Examine:

- **Reliability: Stability over time**
- **Validity: Agreement with Behavioral Risk Factor Surveillance System data**

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BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)

- Probability sample telephone survey
- Collaborative project of CDC and states
- 150,000 - 350,000 adults annually
- There are several similar items on HS and BRFSS surveys
- BRFSS data and summary statistics available on CDC web site

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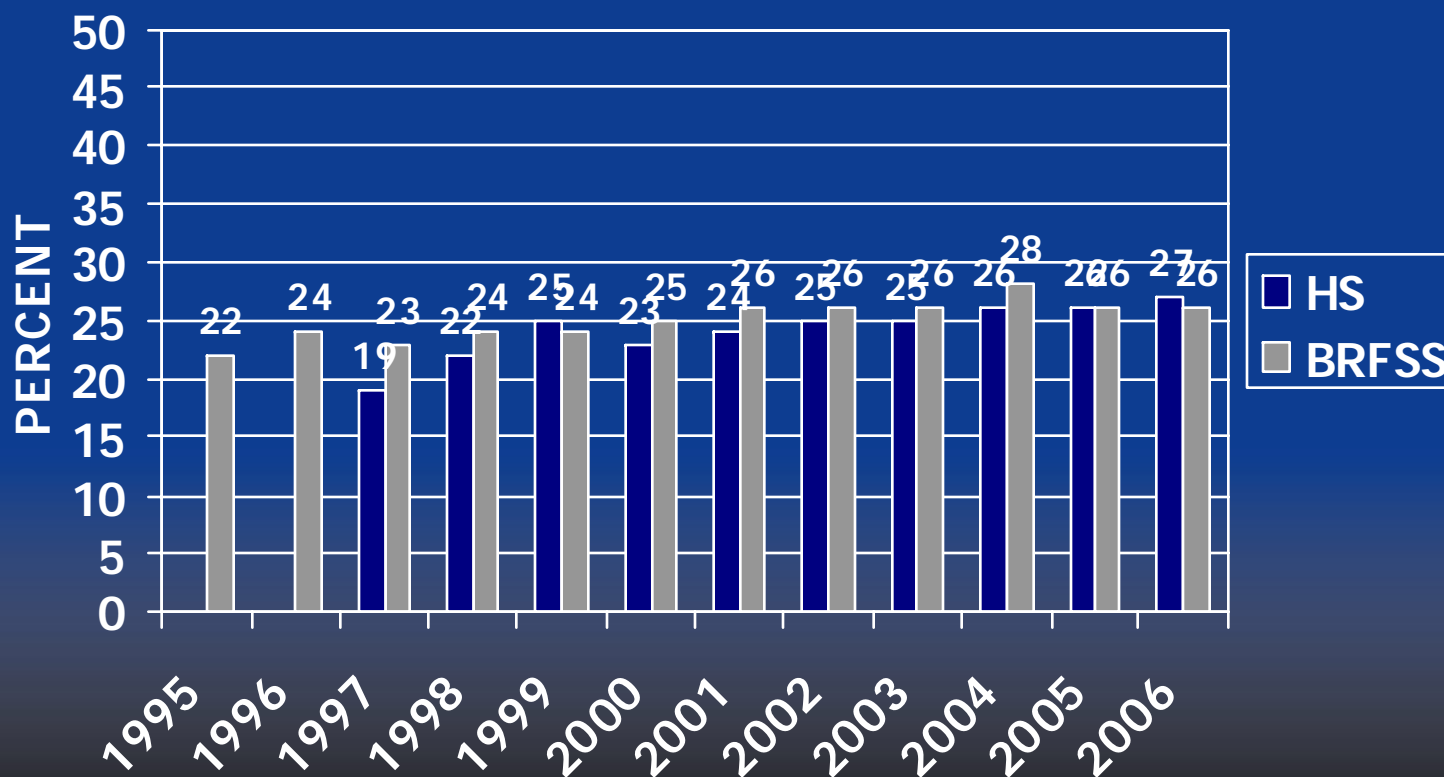
COMPARISONS

- **HEALTH CONDITIONS:** Arthritis, Asthma, Diabetes, High blood pressure, Overweight or obese,
- **ATTITUDES:** Health status self-rating
- **BEHAVIORS:** Flu shot, Pneumonia shot, Smoke cigarettes

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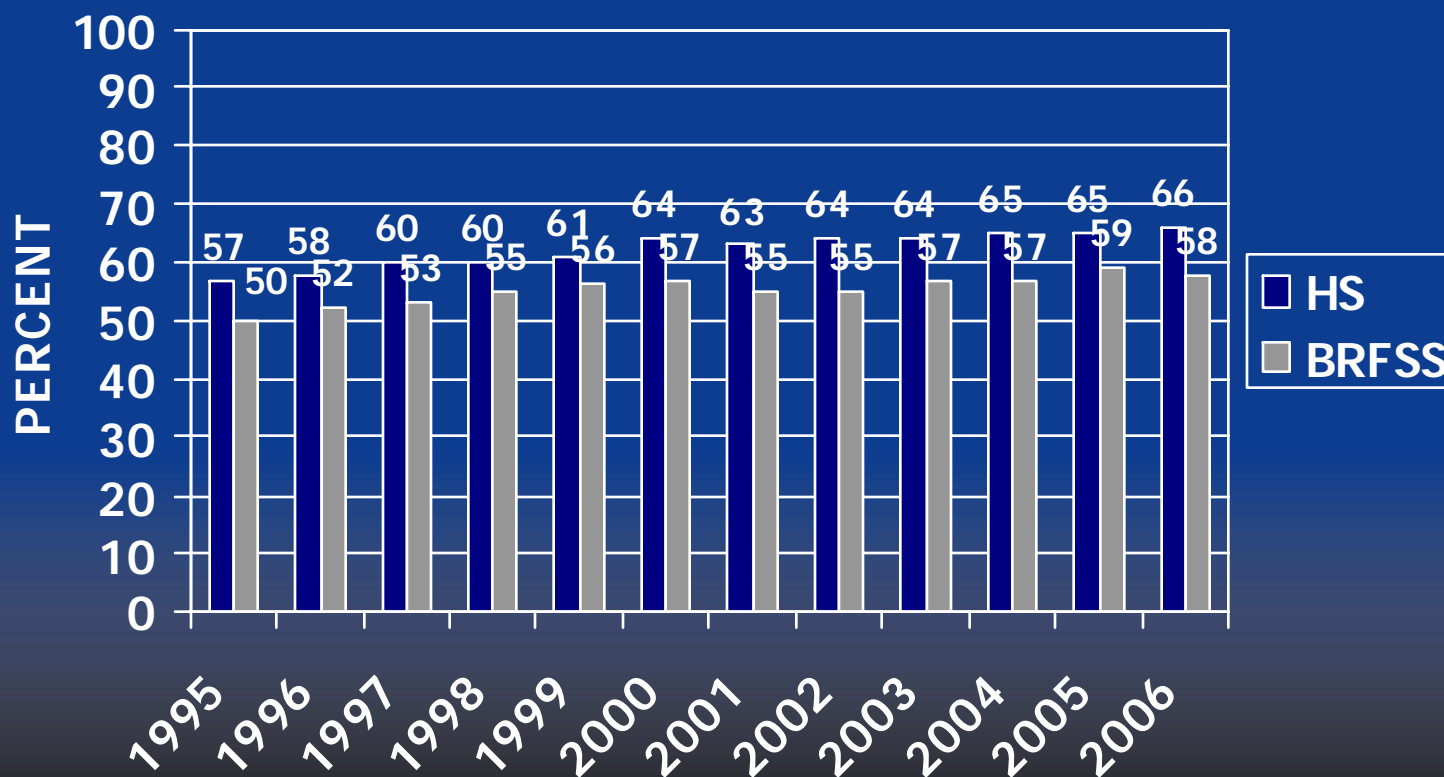
HIGH BLOOD PRESSURE



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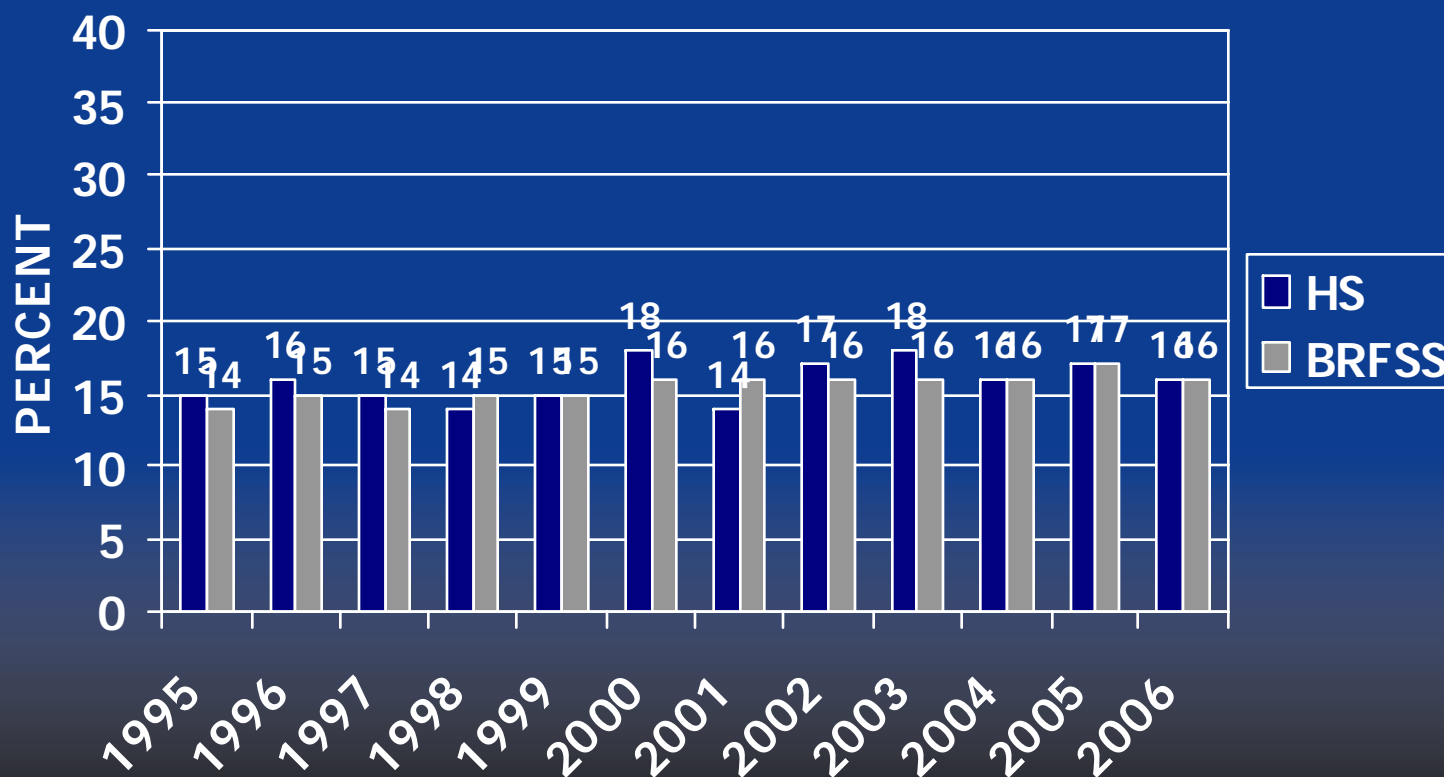
OVERWEIGHT OR OBESE (BODY MASS INDEX 25.0 OR HIGHER)



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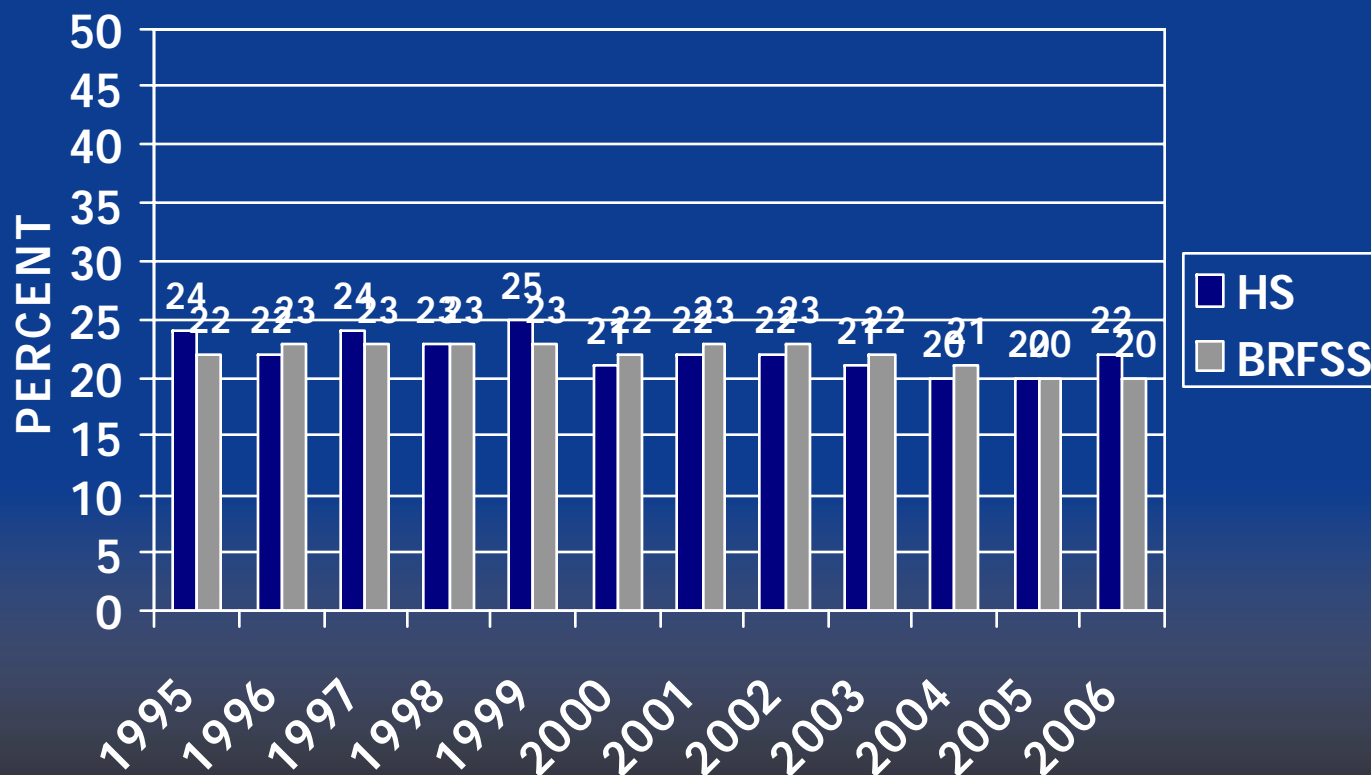
SELF RATING OF HEALTH STATUS: POOR OR FAIR HEALTH



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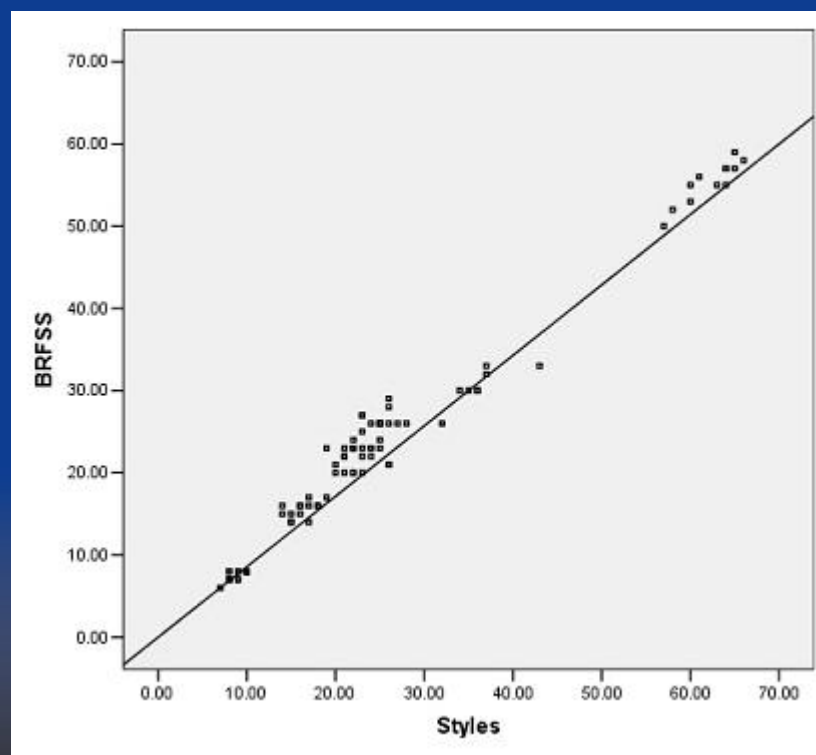
SMOKE CIGARETTES



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SCATTERPLOT OF HEALTHSTYLES (X) AND BRFSS (Y) PERCENTAGES WITH REGRESSION LINE ($r = .99$)



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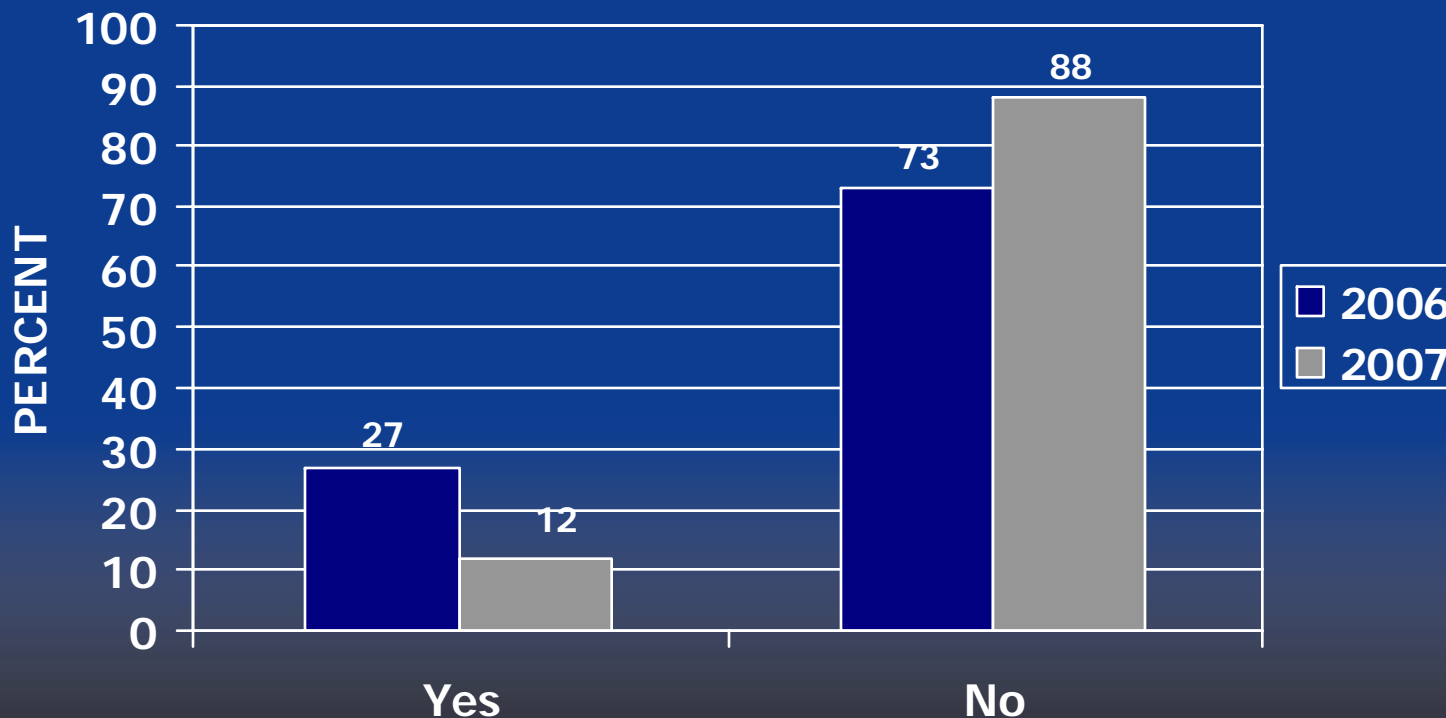
STYLES ITEMS RELATING TO AVIAN FLU IN 2006 AND 2007

- **Worry that respondent or someone in family may get sick from avian flu in next twelve months**
- **Concern about the spread of avian flu in the US**
- **Following news stories about avian flu**
- **Opinion regarding how the news media is reporting the dangers of avian flu**

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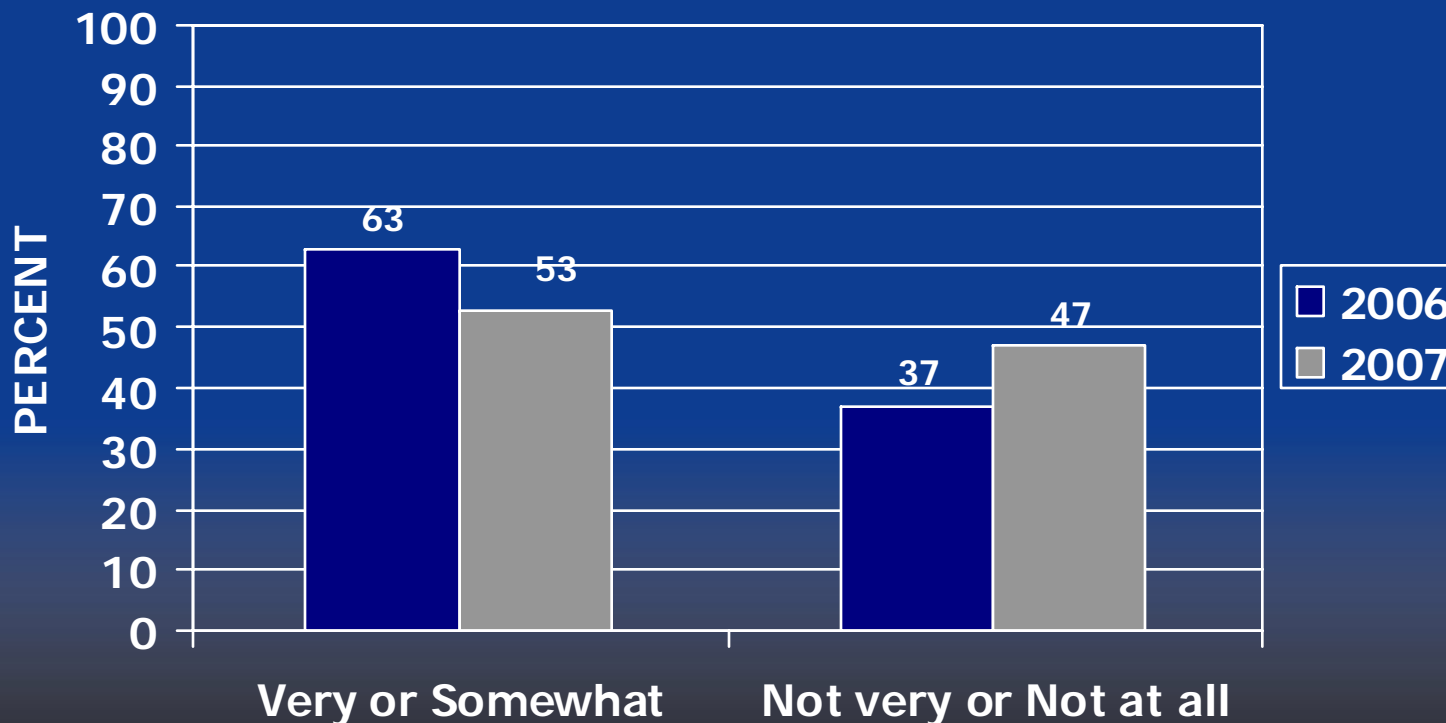
2006 VS 2007: WORRIED THAT I OR SOMEONE IN IMMEDIATE FAMILY MIGHT GET SICK FROM AVIAN FLU IN NEXT 12 MONTHS



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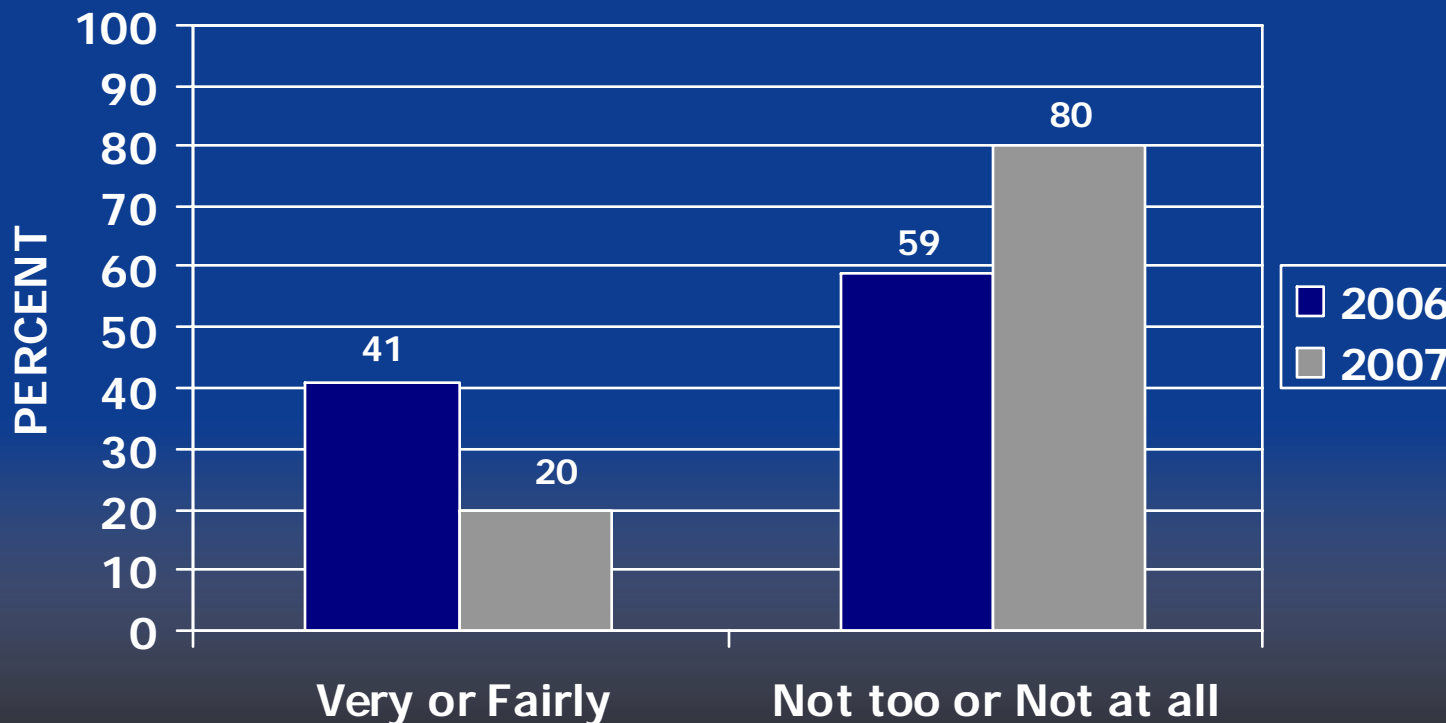
2006 VS 2007: CONCERNED ABOUT THE SPREAD OF AVIAN FLU IN THE US



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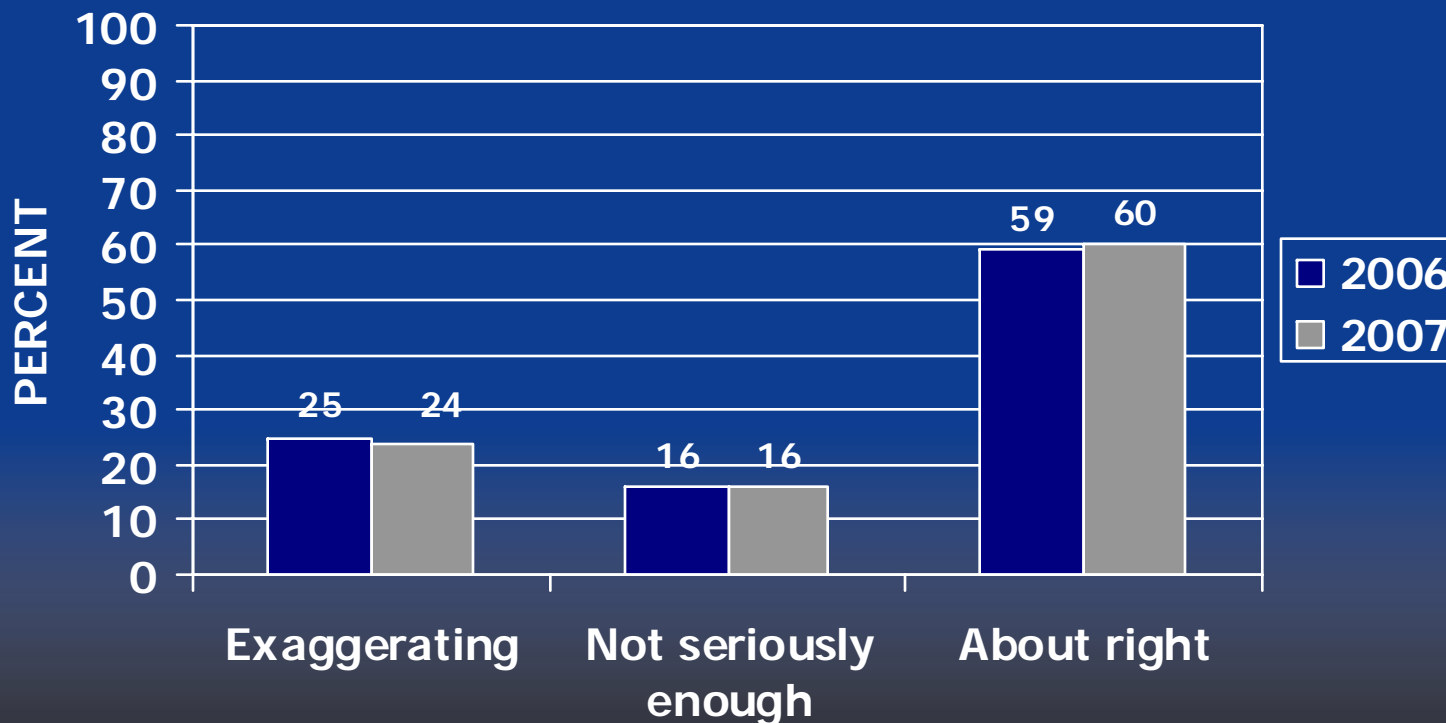
2006 VS 2007: HOW CLOSELY FOLLOWING NEWS STORIES



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2006 VS 2007: OPINION OF HOW NEWS MEDIA ARE REPORTING DANGERS OF AVIAN FLU



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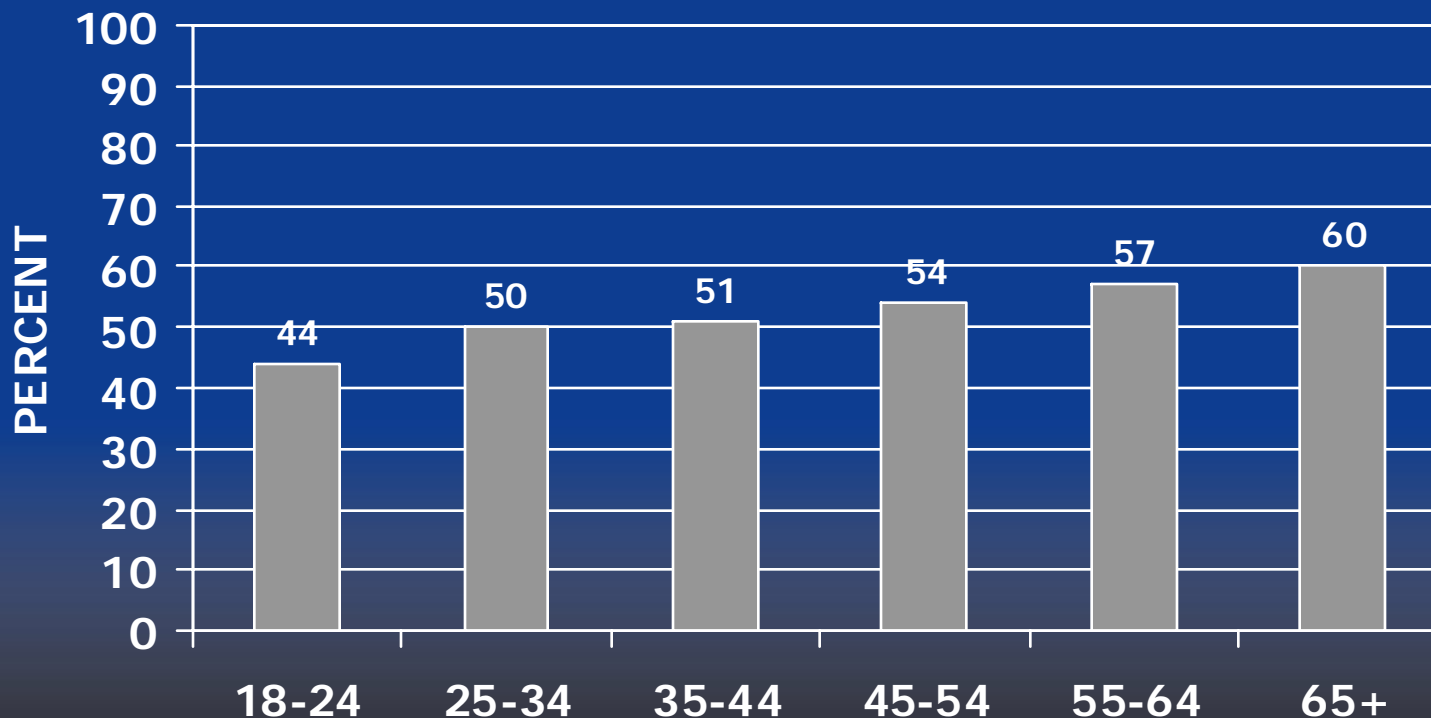
DEMOGRAPHIC BREAKDOWNS IN 2007 RESPONSES

- Age
- Race/Ethnicity
- Sex
- Education

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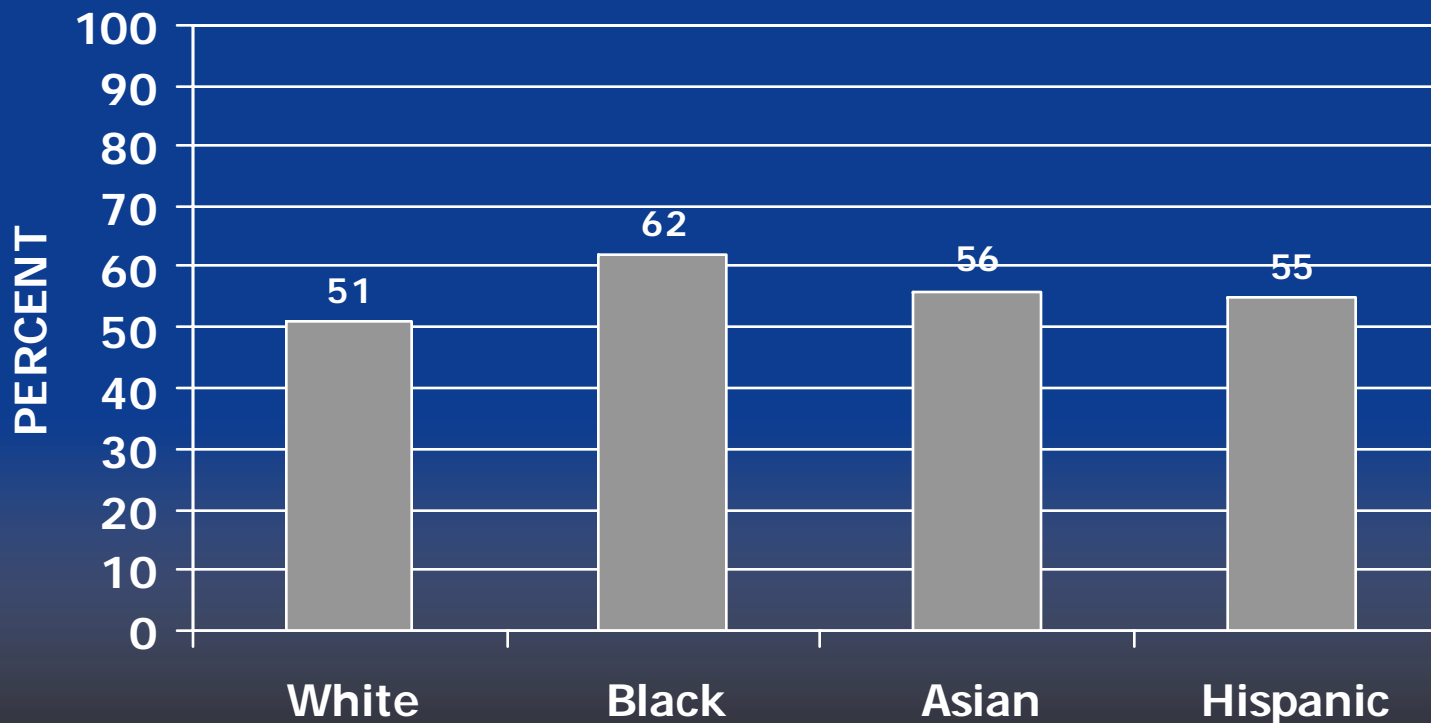
CONCERNED (VERY & SOMEWHAT) by AGE



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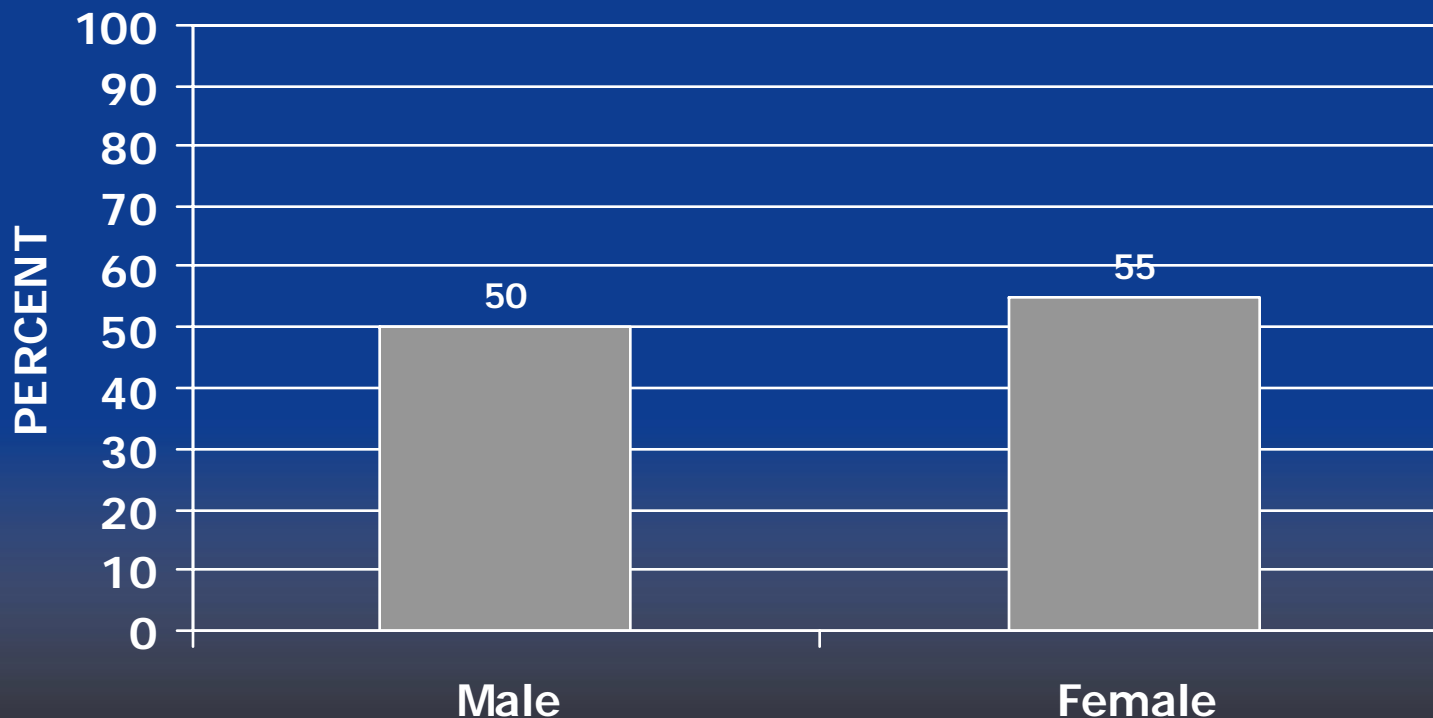
CONCERNED (VERY & SOMEWHAT) by RACE/ETHNICITY



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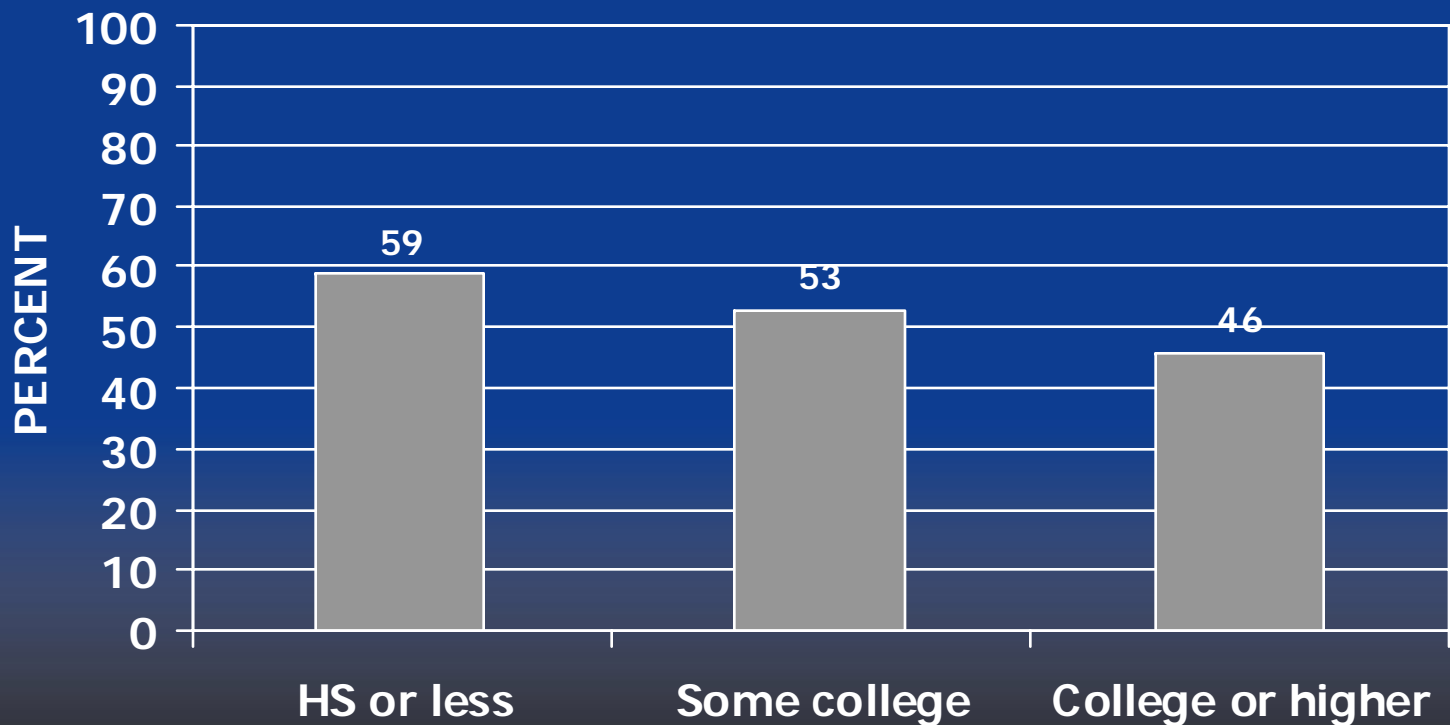
CONCERNED (VERY & SOMEWHAT) by SEX



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CONCERNED (VERY & SOMEWHAT) by EDUCATION



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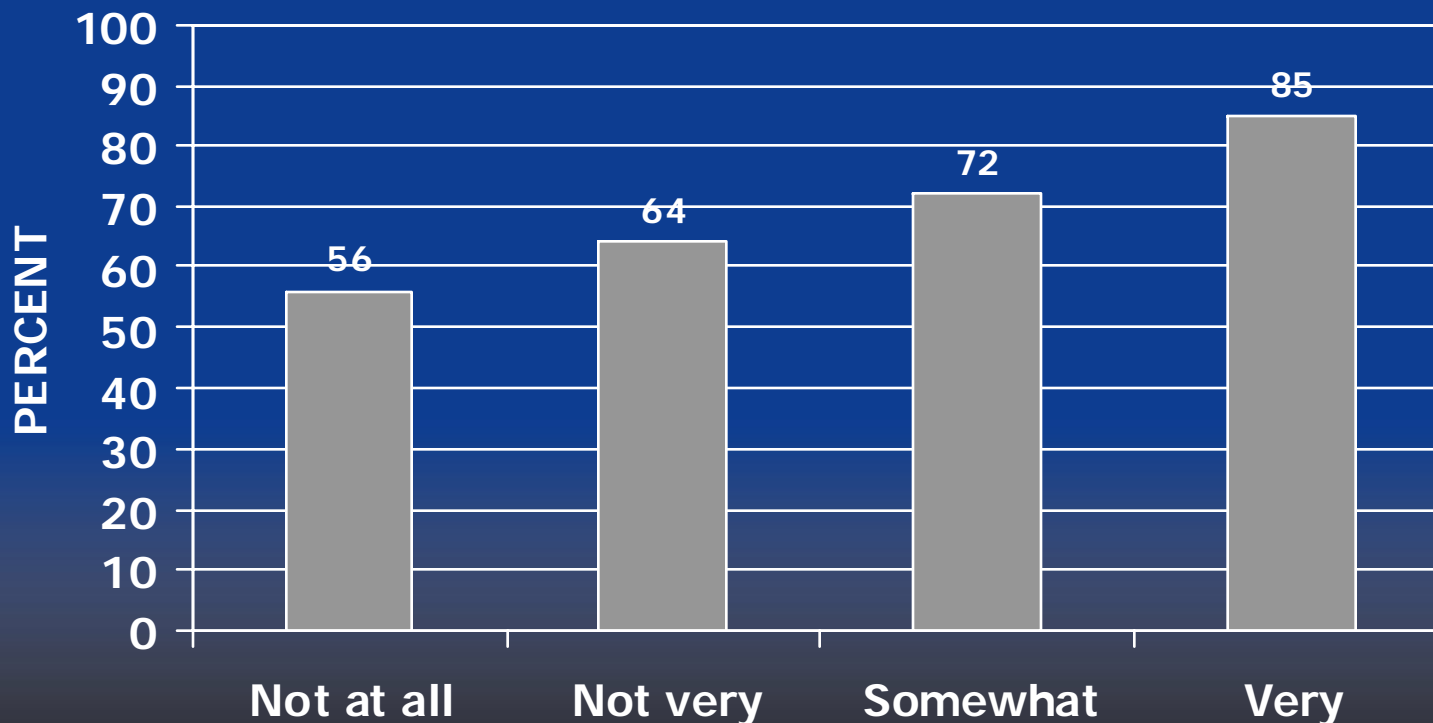
STYLES HEALTH INFORMATION ITEMS

- Interest in health
- Health information seeking
- Relationship with doctor
- Understanding health information
- 5 – point rating scale: Strongly agree – Strongly disagree

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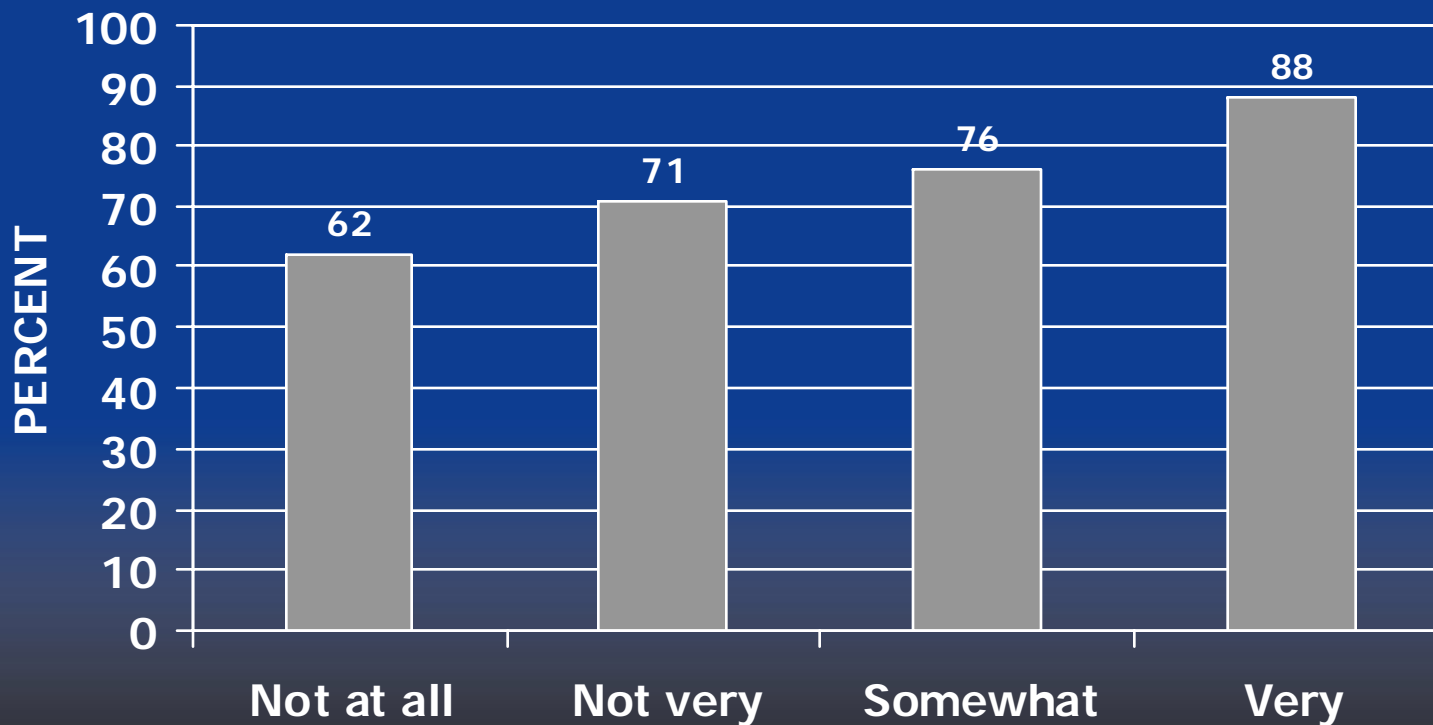
I NEED TO KNOW ABOUT HEALTH ISSUES SO I CAN KEEP MYSELF AND FAMILY HEALTHY (SA & A) by LEVEL OF CONCERN



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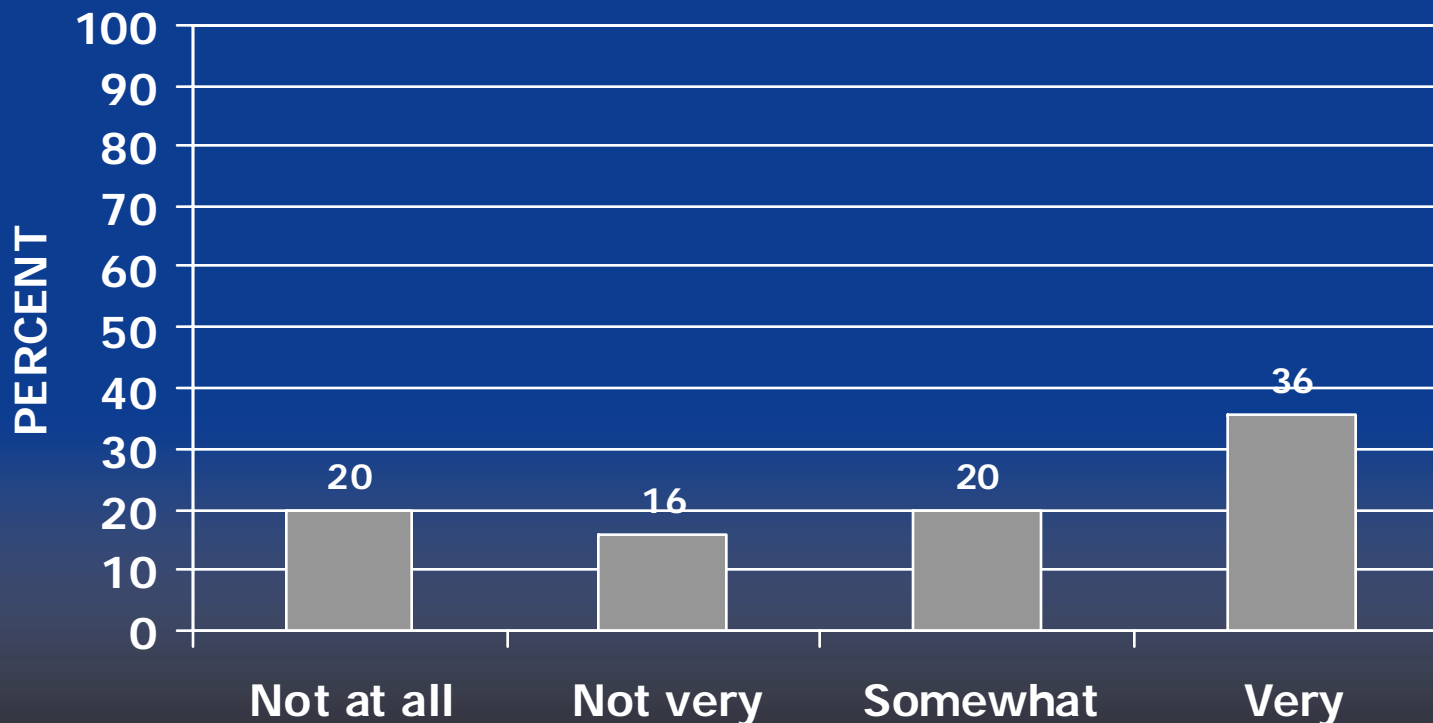
IT IS IMPORTANT TO ME TO BE INFORMED ABOUT HEALTH ISSUES (SA & A) by LEVEL OF CONCERN



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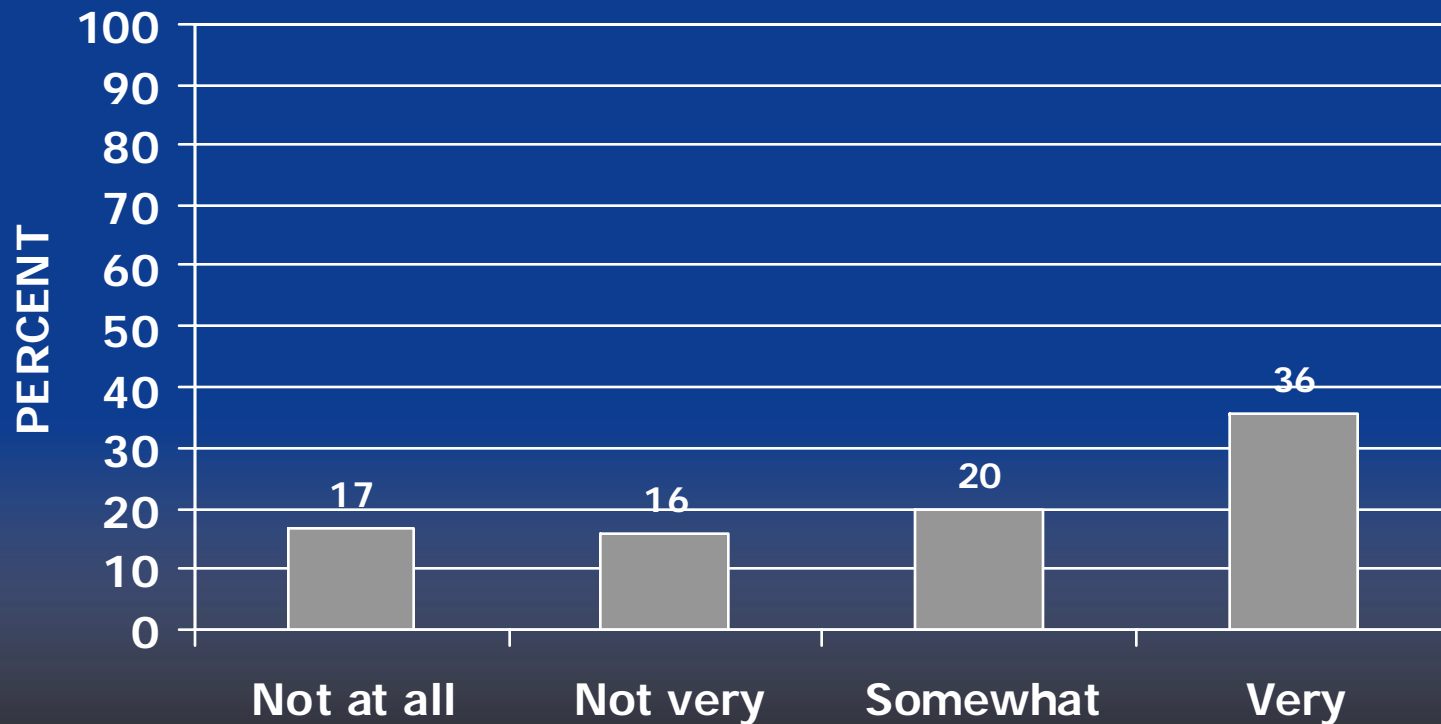
IT IS HARD TO FIND GOOD ANSWERS TO MY HEALTH QUESTIONS AND CONCERNS (SA & A) by LEVEL OF CONCERN



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I HAVE DIFFICULTY UNDERSTANDING A LOT OF THE HEALTH INFORMATION THAT I READ (SA & A) by LEVEL OF CONCERN



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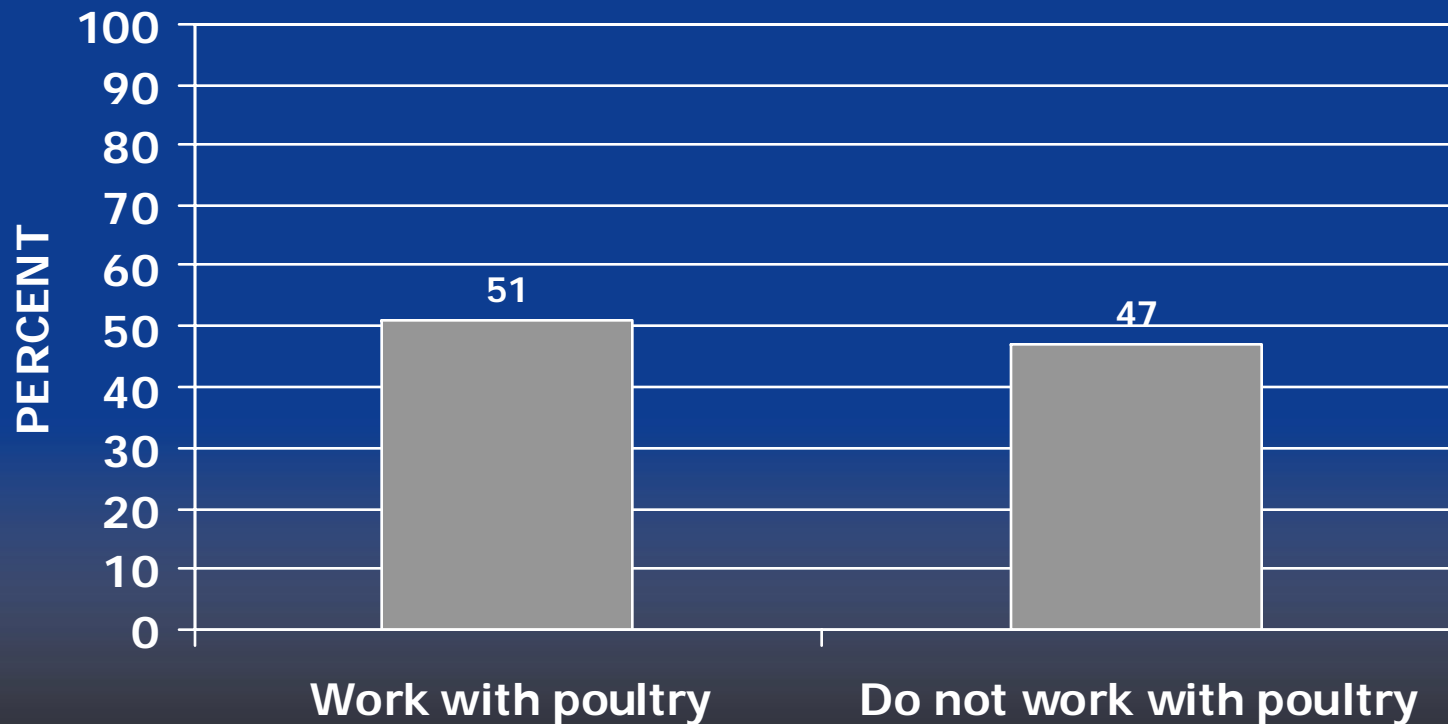
STYLES OCCUPATION ITEMS

- Do you raise chickens or other poultry at home or work at a farm or plant that processes live chickens or other poultry?
- Does your work involve direct contact in the care of patients?

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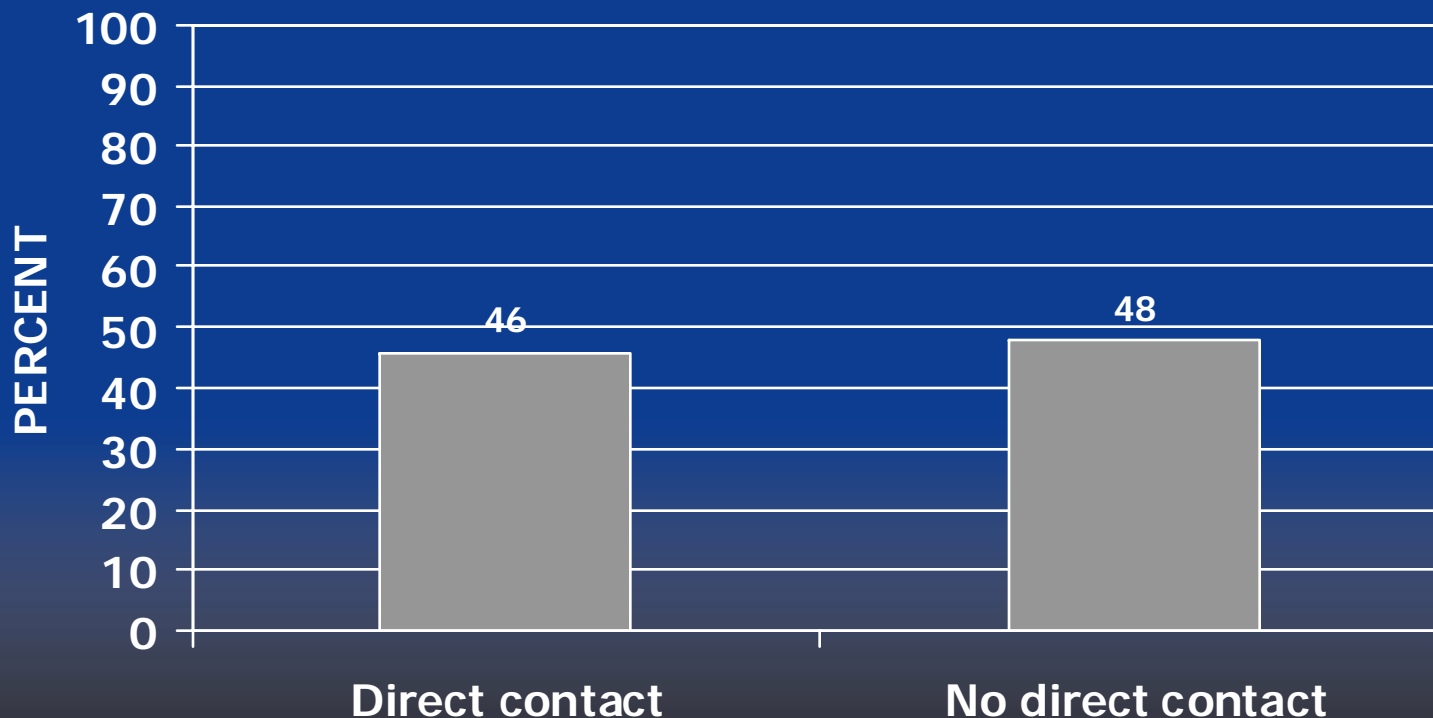
CONCERNED (NOT VERY & NOT AT ALL) by WORK WITH POULTRY AT HOME OR WORK



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CONCERNED (NOT VERY & NOT AT ALL) by WORK INVOLVES DIRECT CONTACT IN THE CARE OF PATIENTS



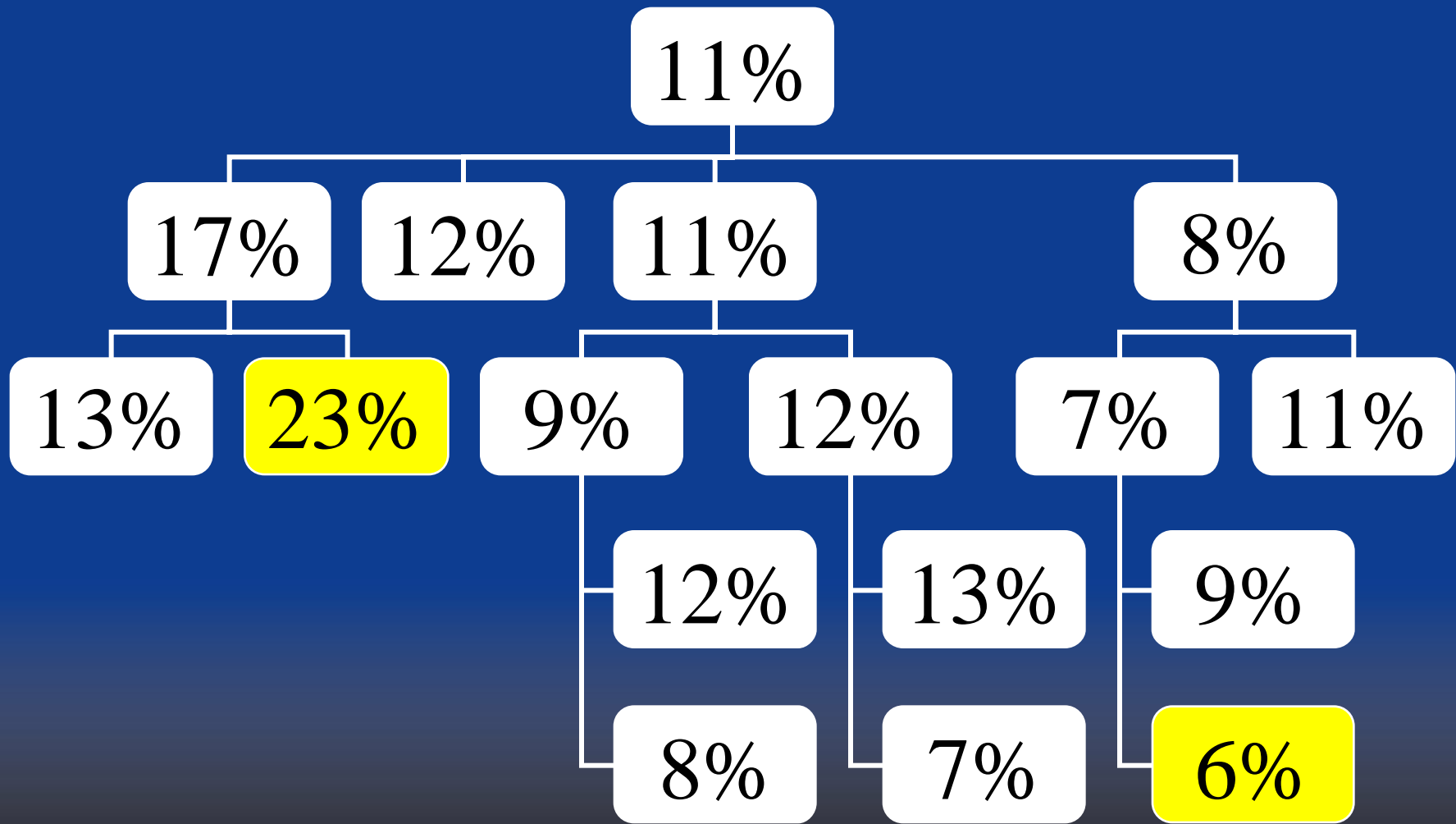
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CHAID SEGMENTATION

- Chi-squared Automatic Interaction Detection
- Differentiates audience subgroups or segments with respect to some target variable
- Based on multiple predictor variables
- Segments with different levels of concern about avian flu formed by combinations of demographic variables
- Look at respondents “Not at all concerned” about spread of avian flu in the US

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ISSUES IN AVIAN FLU COMMUNICATION PLANNING

- Diminished concern and attention among the public
- Reaching younger audiences
- Health information needs of concerned audiences
- Attention to specific occupational groups

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FOR FURTHER INFORMATION

- Contact the author at:

bdp4@cdc.gov

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